Office of Oversight
Review of the
Occupational Medicine Program
at
the Y-12 Plant

April 1999

Office of Environment, Safety and Health

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ACRONYMS

AAAHC	Accreditation Association for Ambulatory Health Care
DOE	Department of Energy
ES&H	Environment, Safety, and Health
ISM	Integrated Safety Management
LMES	Lockheed Martin Energy Systems
S/RID	Standards/Requirements Identification Document
YSO	DOE Y-12 Site Office

OFFICE OF OVERSIGHT REVIEW OF THE OCCUPATIONAL MEDICINE PROGRAM AT THE Y-12 PLANT

1.0 INTRODUCTION

This report provides site-specific results of a Department of Energy (DOE) Office of Oversight review of the occupational medicine program at the Y-12 Plant, conducted February 16-18, 1999. The review at the Y-12 Plant is one portion of an independent oversight review of occupational medicine programs across the complex. The goal of this review is to identify site-specific and DOE-wide issues that require management attention and to provide a foundation for improving occupational medicine program policy and site performance.

Background

The mission of the Office of Oversight includes evaluation and analysis of DOE policies and programs in the areas of environment, safety, health, safeguards, and security. As an important element of a DOE worker safety and health program, occupational medicine programs are included within the scope of selected Office of Oversight assessment activities.

Various Office of Oversight assessments have identified weaknesses in some aspects of occupational medicine programs at several sites. For example, an Oversight evaluation of emergency management across the DOE complex highlighted weaknesses in the interface between occupational medicine programs and emergency management programs at several sites. Because of such weaknesses, some sites may not be adequately prepared to provide timely and effective medical treatment to workers who have been injured or exposed to hazardous materials (e.g., information on the hazardous materials may not be readily available at site or local medical treatment facilities). Similarly, reviews of occupational medicine programs at individual sites during Office of Oversight safety management evaluations indicated that occupational medicine programs at some sites are not accomplishing all of their objectives.

Collectively, the assessment results indicated a need for a more comprehensive review of occupational medicine programs. Consequently, the Office of Oversight decided to perform a two-phase review of occupational medicine programs across the complex. The first phase of the review, encompassing three sites, was completed in November 1998. An interim report issued in January 1999 identified trends and issues that warrant additional review. In this second phase, the Office of Oversight will evaluate additional sites during calendar year 1999. A final report will be prepared after the review of the additional sites is complete.

OVERVIEW OF THE Y-12 PLANT AND ITS OCCUPATIONAL MEDICINE PROGRAM

Activities: The Y-12 site was established in 1943 as part of the Manhattan Project to produce highly enriched uranium and other components for nuclear weapons. The Y-12 Plant's current missions include dismantlement of nuclear weapons; manufacturing of weapons components for defense capability; warehousing of special nuclear material, including storage of designated material under International Atomic Energy Agency safeguards; maintenance of nuclear weapons production process technology; stockpile maintenance and evaluation; non-proliferation and arms control; technology transfer; work for others; environmental restoration; and waste management. Key facilities at the Y-12 Plant include buildings and complexes that house processes used for processing, machining, and manufacturing depleted uranium parts; lithium production and manufacturing; processing and preparing nuclear components for shipment; quality evaluation of nuclear warhead stockpile components and other special nuclear material; enriched uranium recovery from scrap; and recovery, purification, and processing of enriched uranium into useable products or forms suitable for long-term storage.

Budget: The Y-12 actual operating budget for FY 1998 was approximately $448.6 million. The FY 1999 target is approximately $415.6 million. Defense Programs provides for greater than 90 percent of DOE programmatic funding for Y-12 Plant efforts. The medical program budget for FY 1998 was $2.8 million, which equates to approximately $450 per employee.

Site: The Y-12 plant is located about 2 miles from downtown Oak Ridge, Tennessee, in the eastern part of the state. The plant occupies about 811 acres within the Oak Ridge Reservation.

Staff and Visitors: The plant population varies between 5000 and 6000 workers. The DOE Y-12 Site Office employs approximately 30 people.

Organizations: The cognizant secretarial office is the DOE Office of Defense Programs, which has program responsibility for stockpile management, production, research, and development. The DOE Office of Environmental Management has program management responsibilities for waste management and environmental cleanup efforts at the Y-12 Plant. The DOE Oak Ridge Operations Office (OR) manages activities at the Y-12 Plant, along with the other Oak Ridge Reservation sites. With support from OR functional offices, the DOE Y-12 Site Office provides day-to-day safety management and direction to the site contractor.

Occupational Medicine Program: The occupational medicine program was established in 1943 as part of the Y-12 Plant operation. The current medical facility was constructed in 1944 and has been modified several times to adapt to the current mission of the plant. Originally, the clinic was a 24-hour-a-day, 7-day-a-week operation, and had the capability to provide emergency care and accommodate inpatient services. The current medical program operates 10.5 hours per day, 5 days per week, and emergency care encompasses only stabilization and transport to offsite medical facilities.

The medical clinic performs medical surveillance to detect and prevent the effects of ionizing radiation and chemical, physical, and biological stressors. The clinic also treats occupational illnesses and injuries; maintains and stocks supplies at a site emergency preparedness facility; offers wellness programs to give advice and education to employees on ways to develop a healthier lifestyle; acts as consultant to industrial hygiene, radiological control, industrial safety, and management for occupational medicine issues; cooperates with research organizations in planning and developing epidemiological studies; provides limited medical treatment for minor non-occupational illness and injury to prevent lost work time; and assists the legal department, Benefit Plans, Workforce Diversity, Labor Relations, and other health and safety disciplines in areas such as disability retirement, workers compensation, alcohol and drug abuse issues, and disciplinary actions.

Approach and Methodology

In reviewing occupational medicine programs at individual sites, the Office of Oversight supplemented its internal capabilities by teaming with licensed medical physicians who specialize in occupational medicine. To obtain such expertise, the Office of Oversight teamed with the Accreditation Association for Ambulatory Health Care (AAAHC) to perform the review.

The AAAHC is a professional organization that performs surveys of medical clinics and accredits programs that have demonstrated compliance with an established set of nationally recognized standards. As part of the teaming agreement, the AAAHC supplied certified surveyors to supplement the Oversight team in the evaluation of the Y-12 Plant occupational medicine program.

AAAHC participation in this review served two purposes:

- The AAAHC performed an independent survey of the Y-12 Plant occupational medicine program according to their established procedures and standards. As part of this effort, the Y-12 Plant staff completed a self-assessment (called a pre-review survey in the AAAHC process) against the AAAHC standards. The Y-12 Plant can use the AAAHC evaluation to seek accreditation and determine the status of their medical program against national standards. It also provides the Y-12 Plant with AAAHC's suggestions for improvements and provides for an initial assessment of the efforts that the Y-12 Plant would need to perform if they decide to seek continuing accreditation.

- The positive attributes, weaknesses, and insights from the AAAHC survey were factored into the Oversight evaluation of occupational medicine program performance. The insights from professional AAAHC surveyors were considered, in combination with other information gathered by the Office of Oversight team during interviews and tours. In this manner, the AAAHC survey was an important component of the Office of Oversight evaluation of the effectiveness of the Y-12 Plant occupational medicine program with respect to current DOE policy and requirements.

This unique approach to independent oversight provided an effective and efficient way to obtain the independent perspectives of qualified and experienced medical professionals.

Standards for the Site-Specific Review

This independent oversight review at the Y-12 Plant focused on the effectiveness of the Oak Ridge Operations Office, the Y-12 Site Office (YSO), and the Y-12 Plant contractor line management in establishing and implementing an effective occupational medicine program, as defined by applicable DOE orders and policies. The DOE policies that specifically apply to the occupational medicine program are DOE Order 440.1A, Worker Protection Management for DOE Federal and Contractor Employees, and DOE Policy 450.4, Safety Management System. DOE Order 440.1A delineates the basic program elements necessary for an occupational medicine program. It requires that contractors use a graded approach to establish medical program requirements and utilizes supplemental orders and program guidance documents to establish specific medical program expectations and requirements. DOE Policy 450.4 defines a comprehensive and coordinated program of environment, safety, and health (ES&H) expectations and activities that are commonly referred to as integrated safety management (ISM). All site

ES&H programs, including occupational medicine programs, are to be implemented within the ISM framework. Other DOE orders, such as DOE Order 151.1, Comprehensive Emergency Management System, include requirements related to elements of occupational medicine programs.

In reviewing occupational medicine programs across the DOE complex, the DOE Office of Oversight asked the AAAHC to help identify medical program elements that are essential for high-quality patient care and measure program effectiveness against nationally recognized standards. DOE Headquarters Office of Occupational Medicine supports the accreditation process and is in the process of modifying DOE Order 440.1A to be more consistent with accreditation provisions and guidelines. Although not currently a specific requirement of DOE policy or the Y-12 Plant contract, the AAAHC standards generally reflect the philosophy outlined in DOE safety management policies and are relevant to all DOE sites. The AAAHC standards emphasize the quality improvement process, which is a central theme of ISM.

Focus of the Review

Consistent with DOE policy and requirements, a comprehensive occupational medicine program performs several interrelated functions, as delineated in Figure 1. The Office of Oversight review team focused on the site's ability to accomplish each of the listed functions. Section 2.0 of this report identifies positive attributes, issues requiring attention, and conclusions regarding the overall effectiveness of the Y-12 Plant occupational medicine program in meeting its objectives. Section 3.0 presents opportunities for improving the current program.

Occupational Medicine Program Functions

Consistent with DOE policy and requirements, a comprehensive occupational medicine program performs several interrelated functions:

- **Clinical services.** Onsite medical staff perform various routine medical procedures (e.g., physical examinations, laboratory testing) to identify and treat occupational illness or injuries, facilitate recovery and safe return to work, and refer patients for further treatment as indicated. In this regard, the occupational medicine program serves as an onsite clinic and provides timely and convenient access to medical services. In some cases, access to subsidized health services is part of employee benefits packages.

- **Assess worker fitness for duty.** Health evaluations are conducted to provide initial and continuing assessment of employee fitness for duty through the following examination categories: pre-placement, periodic (qualification certification) examinations, return to work, job transfer, and termination.

- **Medical surveillance.** DOE sites often involve hazardous materials, and the work at DOE sites can involve potentially hazardous conditions. As a result, DOE sites need to identify job categories that could involve specific radiological, chemical, biological, or physical hazards and establish a process for routine health examinations and monitoring of employees in such categories. Such a process needs to be coordinated so that the information collected is useful and available to examiners and analyzed to ensure that safety and health management has the necessary information to identify trends, protect employees, respond to requests for information from individuals and stakeholders, and ensure that accurate information is available to ensure the adequacy of the health protection program.

- **Support for site efforts to monitor and control exposure to radiation and hazardous materials.** DOE sites must monitor and control radiation exposure in accordance with a radiation protection plan. Such efforts often require various methods for measuring radiation exposure (e.g., whole body counts) that may be performed on a routine basis or to determine the extent of exposure or appropriate medical treatment after an incident. Similarly, DOE sites must comply with various Federal and state regulations related to worker safety and hazardous materials (e.g., Occupational Safety and Health Administration requirements for protection against exposure to hazardous substances). The occupational medicine program must coordinate with other site organizations to ensure that site hazards are identified and that appropriate measures to mitigate hazards are in place.

- **Support for emergency management preparedness and response.** DOE sites must be prepared to handle emergencies and unplanned releases of radioactive or hazardous materials. Occupational medicine programs need to be able to provide support during an emergency situation; for example, by providing treatment to injured workers, coordinating support with local hospitals, ensuring that information about hazardous materials is readily available to medical personnel who treat exposure victims, and providing recommendations for protecting the public.

- **Information management.** To perform the functions noted above, DOE sites must maintain health information about hazardous materials and employees potentially exposed to those hazards. Many of the materials used at DOE facilities and laboratories, such as plutonium and beryllium, pose significant health risks and are not commonly encountered in general industry. Thus, they may be unfamiliar to community health care providers in the event of an accidental exposure. Occupational medicine program personnel must also be involved in keeping track of the types of hazardous materials at the site and their health effects, documenting worker exposures, recommending treatments, and informing management about the effectiveness of safety and health programs.

Figure 1. Functions of a Comprehensive Occupational Medicine Program

2.0 RESULTS

The following results from the Y-12 Plant occupational medicine program review are a combination of the AAAHC survey findings, which determines compliance with national ambulatory health care standards, and the Office of Oversight review, which determines the effectiveness of DOE contractor occupational medicine programs. Both reviews reflect the principles of ISM, including: identification of roles, responsibilities, and accountabilities; identification of requirements; quality management and improvement; and performance assessment and feedback mechanisms to promote continuous improvement. The Office of Oversight will consolidate these results and the results from the reviews at other sites in a final report that will identify generic issues. These generic issues are intended to help improve the DOE contractor occupational medicine programs and DOE program office and field office management and direction of contractor activities.

Positive Attributes

1. **Roles and responsibilities for the occupational medicine program are clearly communicated and understood.** As part of their standards/requirements identification document (S/RID) process, the Y-12 Plant has formally recognized DOE Order 440.1A, Chapter 19, which establishes the contractor occupational medical program as a basic worker protection requirement. Occupational medicine program roles and responsibilities were clearly understood by YSO personnel; contractor—Lockheed Martin Energy Systems (LMES)—line management; and LMES safety and industrial hygiene personnel. LMES medical clinic procedures were comprehensive, although they need some modifications to reflect both ISM and AAAHC standards. The LMES medical staff had a clear understanding of the standards and criteria necessary for accreditation by the AAAHC, and the program is positioned to achieve full accreditation in 6 to 12 months.

2. **The occupational medicine program interfaces with industrial hygiene, safety, and line management appear to be effective**. The Industrial Hygiene organization has formalized a process that integrates hazard information, exposure assessment data, and exposure groupings into an automated system, which can be accessed for individual employees. Data sheets for employees who are scheduled for medical surveillance examinations are printed and distributed to the medical examiner so that informed examinations can take place. The Industrial Hygiene organization also has assigned a single point of contact for medical-related questions, issues, and concerns. All information requests between medical staff and Industrial Hygiene are recorded and tracked through resolution. ES&H management has recently assigned safety professionals to the medical clinic facility. Safety professionals work with the medical staff, line management, and human relations to accurately report and investigate work-related injuries and illnesses in a timely manner. Injured workers are then followed through an interdisciplinary case management program to ensure prompt treatment and safe return to work with minimal lost workdays. In the first three months, this new program has reduced lost workdays by over 50 percent from last year. Line management responsible for ISM, hazard identification, and new activity startup requirements participate in Operational Safety Boards, which are responsible for identifying employee hazards and associated controls.

3. **The Y-12 Plant occupational medicine program has achieved compliance with most AAAHC standards**. The Y-12 Plant occupational medicine program was substantially compliant in 13 of 15 evaluated standards. The Y-12 Plant is positioned to achieve full

accreditation in 6 to 12 months if it makes some revisions to address specific issues concerning core standards related to the criteria for administration and for quality management and improvement. The medical clinic personnel have worked diligently to adopt accreditation standards and have accomplished many of the medical program enhancements necessary for accreditation in a relatively short period. Appendix A provides additional details about the AAAHC survey results.

4. **The LMES occupational medical program has been proactive and willing to work towards continuous improvement in support of DOE Headquarters occupational medicine program initiatives**. The willingness of the LMES occupational medicine program staff to participate in occupational health issues was evident in the establishment of the beryllium exposed worker support group and the beryllium education program. A bi-weekly meeting that allows workers who may have been exposed to beryllium to discuss problems, share information, and suggest improvements in the beryllium program is sponsored by the medical clinic psychology staff. A workshop for managers, community medical providers, and employees was also sponsored by the medical staff to discuss beryllium disease and its treatment and to encourage awareness for individuals who provide support to the exposed population. More recently, the clinic staff has held meetings to discuss emergency management requirements with community emergency medical providers. The agenda was devised to improve coordination and communication among community emergency service providers and to inform potential emergency responders about the site hazards and resources that would be needed to handle a site emergency. Further, the decision to pursue accreditation and the willingness to work towards voluntarily achieving national ambulatory health care standards demonstrates a commitment to quality improvement.

Weaknesses and Issues Requiring Attention

1. **The occupational medicine surveillance program is not procedurally linked to the ISM implementing procedures**. LMES has established a series of detailed procedures that apply ISM principles to the conduct of work within their facilities. As a part of this process, LMES requires a hazard identification checklist to be filled out. This checklist addresses many occupational medicine program requirements, such as beryllium, lead, and mercury exposures. However, this checklist omits any reference to the Occupational Medical Procedure that defines the types of work that require personnel performing that work to be enrolled in a medical surveillance program. Currently, knowledgeable industrial hygienists ensure that the occupational medicine program requirements are addressed. However, this process is not adequately referenced in the implementing procedures.

2. **The assessment programs do not adequately cover some elements of the occupational medicine program.** The LMES self-assessment program for the occupational medicine clinic is comprehensive and addresses most internal functions performed by the medical staff. However, the requirement for contractor line management to provide hazard information, notifications concerning employee health, and information to assist the medical director is not effectively addressed in the existing facility self-assessment or performance assessment program. Recent corporate audits have not included occupational medicine program requirements as elements that were scheduled for review. Facility-level self-assessments have not integrated contractor management requirements for the occupational health program.

Conclusions

The current Y-12 Plant mission includes various nuclear and non-nuclear activities, such as manufacturing, weapons dismantlement, and weapons storage. These activities involve a number of potentially hazardous substances, including special nuclear materials, hazardous metals, chemicals, and waste products. Since its inception during the Manhattan Project, the Y-12 Plant occupational medicine program has adapted to numerous changes in the site missions and hazards and has developed to generally meet the site's current needs. Continued coordination between the occupational medicine program and line management is needed to ensure that potential hazards are identified and controlled on an ongoing basis as site operations are modified.

DOE site management and Y-12 Plant ES&H management are generally knowledgeable and supportive of the occupational medicine clinic and the Y-12 Plant occupational medical program. DOE requirements, as established in DOE Order 440.1A, Worker Protection Management for DOE Federal and Contractor Employees, were formally accepted and supported by the LMES site S/RID process. The Y-12 Plant is making considerable progress in establishing an effective ISM program, especially in nuclear facilities, according to the integrated safety management evaluation of the Y-12 Plant, completed in December 1998. Facility procedures are in place to identify and control hazardous materials and processes.

The Y-12 Plant ES&H programs and the medical program staff have effectively integrated their resources to better capture information on hazards and health effects, improve communication, improve injury/illness reporting, and reduce time lost due to occupational incidents. Case management programs have been successfully modified to better follow and assist employees in preventing future accidents and safely returning to work as quickly as possible. DOE and LMES have initiated efforts to identify former and current beryllium workers and provide information and support to them, with the support of the medical program. These initiatives and similar activities, such as efforts to communicate with local emergency facilities and emergency responders, indicate a willingness to address critical occupational health issues and improve the quality of occupational health at the Y-12 site.

The AAAHC survey verified that the basic elements of a high-quality occupational medicine program are in place. Following the clinic's decision to seek accreditation from AAAHC, Y-12 Plant occupational medicine personnel have implemented a patient bill of rights, a peer review program, a credentialing program, and a quality improvement program. They have also improved their occupational medicine services. Several policies and procedures have been written or enhanced, and several quality studies have been initiated to promote effective utilization of health services. The AAAHC surveyor noted that the Y-12 clinic should be able to achieve full accreditation in 6 to 12 months if they sustain their rate of improvement and maintain their strong management support.

The AAAHC also identified the need for additional improvements in some areas, primarily the sections on administration and on quality management and improvement in the core AAAHC standards. These issues need to be corrected as the Y-12 occupational medicine program prepares for future accreditation surveys.

Although many elements are currently effective, the Y-12 Plant occupational medicine program faces additional challenges and will require continued management support. Recognition, understanding, and integration of occupational medicine program requirements into the line organizations are not easily achieved. Medical personnel cannot reasonably access the entire site to validate the effectiveness of line implementation of occupational medicine program

requirements. The Y-12 Plant safety and health managers need to rely on personnel in various disciplines, such as safety, industrial hygiene, and health physics, to be knowledgeable of potential health effects and assist line management in coordinating with medical professionals when health issues may arise. To ensure that such interfaces are effective, facility policies and procedures should reference appropriate medical surveillance requirements so that line managers are aware of their responsibility to identify hazards and identify employees potentially affected by those hazards. Facility policies and procedures also need to ensure that medical surveillance requirements are followed for employees who require surveillance examinations. Similarly, facility self-assessments, reviews, and quality programs should include the elements necessary to ensure that medical program requirements are being satisfied and that management is assured that an effective occupational medicine program is in place.

3.0 OPPORTUNITIES FOR IMPROVEMENT

The potential enhancements are not intended to be prescriptive. Rather, they are intended to be reviewed and evaluated by DOE and contractor line management, and modified as appropriate to meet DOE and site-specific objectives and expectations.

LMES ISM implementing procedures should be revised to ensure that appropriate medical controls are implemented. LMES should revise their ISM implementing procedures to ensure that that there are formal linkages between the occupational medicine program and the personnel responsible for planning and performing work. Such linkages are needed to ensure that appropriate medical controls are formally implemented. The revisions will help ensure that medical surveillance is provided to the appropriate workers.

Y-12 Plant assessment programs should ensure that employees are included in the appropriate medical surveillance category. The Y-12 Plant has sitewide ES&H assessment programs that are designed to verify the appropriate identification of hazards or the effectiveness of established hazard controls. These assessment programs should include methods for ensuring that employees who may be exposed to identified hazards are included in the appropriate medical surveillance category.

APPENDIX A

ACCREDITATION ASSOCIATION FOR AMBULATORY HEALTH CARE, INC.
SURVEY COMMENTS
Y-12 PLANT OCCUPATIONAL MEDICINE PROGRAM

Introduction

As part of the normal survey process, the Accreditation Association for Ambulatory Health Care (AAAHC) provides detailed evaluation results to the site. The AAAHC results include a rating (i.e., substantially compliant, partially compliant, or non-compliant) for each of the applicable standards. The standards published in the "Accreditation Association Handbook for Ambulatory Health Care" describe organizational characteristics that AAAHC believes to be essential for high-quality patient care. For those standards that are partially compliant or non-compliant, the surveyor provides written comments about the observed weakness.

The AAAHC report for the Y-12 Plant consisted of approximately 79 pages of completed evaluation forms, which include supporting comments. The AAAHC also identified a set of potential improvements that would strengthen the Y-12 Plant occupational medicine program and correct weaknesses noted during the survey. The Office of Oversight developed the following summary of the AAAHC comments. The actual survey results will be provided to the Y-12 medical director for review and comment when this report is distributed.

AAAHC Assessment

The Y-12 occupational medicine program was in substantial compliance with 13 of 15 standards determined to be applicable to the AAAHC accreditation process. The areas of substantial compliance were:

- Rights of patients
- Governance
- Quality of care provided
- Clinical records
- Professional improvement
- Facilities and environment
- Emergency services
- Immediate/urgent care
- Pharmaceutical services
- Pathology and medical laboratory services
- Diagnostic imaging services
- Occupational health services
- Other professional and technical services.

The areas of partial compliance were:

- Administration
- Quality management and improvement.

No areas of non-compliance were identified during this survey.

The surveyor indicated that the Y-12 occupational medicine program had made substantial improvements over the past four months. Assuming continued improvement, the program could be accredited in the next year.

The following paragraphs summarize AAAHC comments related to specific standards.

Rights of Patients

Nursing assessment areas do not provide sufficient privacy for discussions and interviews. Physician exam areas provide adequate privacy.

Medical data on injury/illness reports is routinely released to supervisors.

Stacks of patient charts awaiting signatures are stored in exam rooms while the rooms are in use. There is limited storage space for records.

The patient "bill of rights" is excellent. It should be incorporated into policy, procedures, and training materials and should be placed on the Web page. The Y-12 Plant should consider expanding information about workers compensation by making pamphlets available in the waiting room.

Safety and health care staff should sign confidentiality statements to ensure that they understand the need and responsibility to protect sensitive medical information.

Governance

Storage space in the clinic is very limited.

Nurses were concerned about the patient load being excessive. Staffing and patient loading should be reviewed by management.

The governing authority should be clearly communicated in policies and procedures. Immediate administrative staff support is a program strength.

The Y-12 Plant should determine how the results from the quality management improvement program will be integrated into management functions.

The Y-12 Plant does not have an integrated risk management program or document.

Job descriptions should be reviewed to ensure that they are current and accurate.

The policy on continuing medical education requirements is fragmented and should be summarized in a medical policy.

The procedure for credentialing and re-credentialing is new. Not all elements of the program have been implemented.

Medical clinic policies should be revised to require Drug Enforcement Administration certification for each provider.

A procedure for verifying the initial credential/application process is not in place.

Administration

Several policies regarding personnel are incomplete, outdated, inaccurate, or not included in existing written policy. Such policies include the physician evaluation process, job descriptions, and credentialing requirements. Current procedures should reference the existing Physician Assistant protocols.

A new patient satisfaction survey has been completed. The policy should be updated to include the patient satisfaction survey.

Quality of Care Provided

Policy and procedures are in place for informing patients of abnormal results in a timely manner.

Quality Management and Improvement

The chart audit peer review program is new and was implemented rather quickly. Data from the audits should be summarized. Their conclusions should be reported to staff and the administrative supervisor of the department, and should be integrated into the quality improvement program. The audit program should also be included in policies and procedures.

The organization does an excellent job of monitoring important elements of care, such as prostate-specific antigen studies.

The Y-12 Plant organization demonstrated that it understands quality improvement studies and is able to complete a sound quality study.

The Y-12 Plant organization should identify major areas of liability for its medical department and decide whether current policies and procedures are adequate.

Clinical Records

Some charts for individuals who were being seen for injuries did not record vital signs. Charts for individuals being seen for surveillance exams did have vital signs recorded. Allergies were listed in several locations in the charts; it is desirable that such information be placed in one designated area of a chart. It is preferable to have one problem list for the examination form; currently, there are three different problem lists in the chart.

Facilities and Environment

Clinic space is very limited. The doorway was partially blocked during the tour. There were no exit diagrams in the patient care rooms or in the x-ray area. Several items that could cause individuals to trip (trip hazards) were noted; these items may have been in pathways because of the limited storage space.

There is no suitable holding area for storing charts while they are awaiting examiner signatures; currently, they are sometimes placed in the physician examination room, where they could be accessible to unauthorized personnel.

Emergency Services

The emergency plan should include estimates of the numbers of individuals who may be exposed or injured in the event of an emergency. Emergency decontamination services were well organized and well stocked for emergencies.

Occupational Health Services

The respirator clearance program should be updated to reflect current Occupational Safety and Health Administration standards.

The industrial hygiene data and ergonomic data was available on charts of employees who have undergone personal sampling. This aspect of the program is excellent.

Charts contained some narrative data concerning employee work exposures and occupational health concerns; however, more narrative would be better. The examiner was more likely to discuss personal risk factors than occupational risk factors. Employee counseling about occupational hazards was not routinely noted in the 30 charts reviewed. Hazard reduction counseling given to employees should be reflected in chart notes. Only one note about hazard reduction was found in 30 charts reviewed.

It would be useful to include relevant area sampling data in addition to personal monitoring data in the information data sheet provided to the clinic.

Other Professional and Technical Services

The Y-12 Plant should implement a peer review program for services provided by the psychologist.